

PUBLIC HEALTH FACT SHEET

Hepatitis B

Massachusetts Department of Public Health, 305 South Street, Jamaica Plain, MA 02130

What is hepatitis B?

Hepatitis B is a serious viral disease, and is responsible for an estimated 4,000 to 5,000 deaths each year in the United States due to liver damage (cirrhosis) and liver cancer. Most people who get the disease recover from it and can never get it again. However, about 10% of the people who get the disease will carry the virus for a long time and during this time can pass it on to others. Symptoms of hepatitis B infection include weakness, feeling ill, loss of appetite, fever, headaches, yellow skin and eyes (jaundice), dark urine, and pain in muscles, joints and the stomach. Long-term or chronic illness can lead to liver damage, liver cancer and death. Symptoms can begin as soon as six weeks or as long as 6 months after contact with the virus. Many people have mild symptoms and some do not notice symptoms at all.

Is hepatitis B dangerous?

Yes. Most adults (about 90%) who get it will get better within six months, but some will carry the virus for a long time (chronic carriers). Infants born to infected mothers often become chronic carriers. These carriers can develop chronic liver problems, which can lead to liver cancer, cirrhosis (liver failure), and death. Carriers have the virus in their body fluids and can infect their families, housemates, and sex partners. Each year in the United States, 80,000 people develop new hepatitis B infections, and as many as 11,000 of them are hospitalized.

How is hepatitis B spread?

Hepatitis B virus (HBV) is spread by contact with the blood, semen, vaginal fluids, or certain other body fluids of an infected person. When these fluids enter a person's blood through mucous membranes (such as those in the mouth or sex organs) or breaks in the skin, the virus can also enter. The virus can be spread by having sex without a condom or by sharing needles (for shooting drugs, ear or body piercing, or tattooing) with an infected person. Health care workers who get stuck by used needles can get infected. Pregnant women who have the virus in their blood can pass it to their babies while giving birth. Sharing a toothbrush, razor, or anything else that might have blood on it can also spread the virus. HBV is 100 times more contagious than HIV. About 1 of every 3 people infected with the hepatitis B virus in the U.S. does not know where they got their infection.

Can it be treated?

Most people with hepatitis B get better without treatment. Some forms of chronic hepatitis B infection can be treated with a drug called interferon.

How can you prevent hepatitis B?

The best way to prevent hepatitis B is to avoid contact with the body fluids of infected people. This means using condoms when you have sex, wearing latex gloves if you handle body fluids such as blood, and never sharing a needle, toothbrush, razor or anything else that might have blood on it.

Protect your children by having them vaccinated with 3 doses of hepatitis B vaccine before they are 18 months old. All three doses are needed for full and lasting immunity. People who have not had the vaccine and become exposed to the virus should get a shot called HBIG, as well as the vaccine. HBIG will protect you right away, but it will only work for a few months. After three doses, hepatitis B vaccine protects most people for at least 15 years. Adolescents 11 to 15 years of age may need only two doses of hepatitis B vaccine, separated by 4-6 months. Ask your health care provider for details.

Women should be tested for hepatitis B every time they get pregnant. If they have the virus, their infants will need HBIG and vaccine soon after they are born to protect them against the disease. The babies will also need two more doses of the vaccine when they are one month and six months old.

Who should get hepatitis B vaccine?

- All newborns and children through the age of 18
- Adults over 18 who are at risk

Adults at risk include people who have more than one sex partner in 6 months, men who have sex with men, sex contacts of infected people, illegal injection drug users, health care and public safety workers who might be exposed to infected blood or body fluids, household contacts of persons with chronic HBV infection, and hemodialysis patients. If you are uncertain whether you are at risk, ask your doctor or nurse.

Is hepatitis B vaccine safe?

Yes, it is safe for most people. However, a vaccine, like any medicine, is capable of causing serious problems such as severe allergic reactions, which are extremely rare with any vaccine. However, the most common problems are soreness where the shot was given or fever. Getting hepatitis B vaccine is much safer than getting hepatitis B disease, and most people do not have any problems with it.

Who should not get hepatitis B vaccine?

- People who have had a serious reaction to baker's yeast (the kind used for making bread), other vaccine component, or a previous dose of the vaccine should not get hepatitis B vaccine.
- People who are moderately or severely ill at the time the shot is scheduled should usually wait until they recover before getting hepatitis B vaccine.

Is the hepatitis B vaccine required for anyone?

In Massachusetts, the hepatitis B vaccine is required for all children who attend licensed child care or preschool, kindergarten-grade 5, and grades 7-9. This requirement will be phased in to include all grades, K through 12 by 2004. In addition, hepatitis B vaccine is currently required for all freshmen and health science students attending college. This requirement will be phased in to include all sophomores in 2002, juniors in 2003, seniors in 2004, and graduate students in 2005. OSHA requires private employers to offer hepatitis B vaccine to workers who might come into contact with blood, blood products, or other body fluids on the job.

Are there other kinds of hepatitis?

Yes. There are many kinds of hepatitis caused by viruses. The symptoms are so alike that blood tests are needed to tell them apart, but they are not all spread the same way. In the U.S., the most common types of hepatitis are A, B and C. Types B and C are spread through blood and other body fluids, but type A is spread through contaminated food, water, or stool (feces). Fact sheets on hepatitis A and hepatitis C are available from the Department of Public Health.

Where can you get more information?

- **Your doctor, nurse or clinic**
- **Your local board of health** (listed in the phone book under local government)
- **The Massachusetts Department of Public Health**, Immunization Program at (617) 983-6800, toll-free at 1-888-658-2850, on the MDPH web site at <http://www.state.ma.us/dph/>, or at the MDPH Regional offices at:

Central Region, West Boylston	(508) 792-7880
Metro/Boston Region*, Jamaica Plain	(617) 983-6860
Northeast Region, Tewksbury	(978) 851-7261
Southeast Region, Lakeville	(508) 947-1231
Western Region, Amherst	(413) 545-6600
- **Occupational Health and Safety Administration (OSHA)** Region I Office (617) 565-9860

* Boston providers/residents may also call the Boston Health Commission at (617) 534-5611.